

### Trend Study 3-3-01

Study site name: Clay Basin.

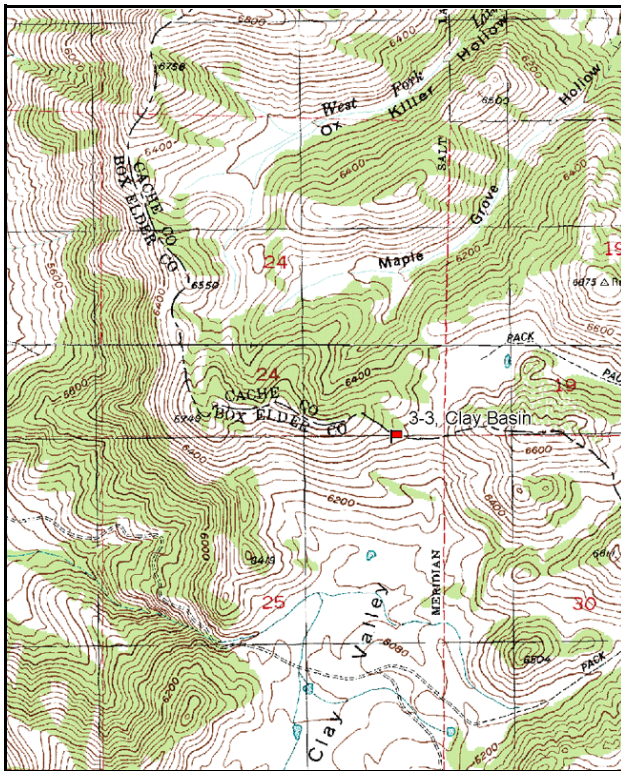
Vegetation type: Big Sagebrush-Grass.

Compass bearing: frequency baseline 163 degrees magnetic.

Frequency belt placement: Line 1 (11 & 95ft), line 2 (34ft), line 3 (59ft), line 4 (71ft).

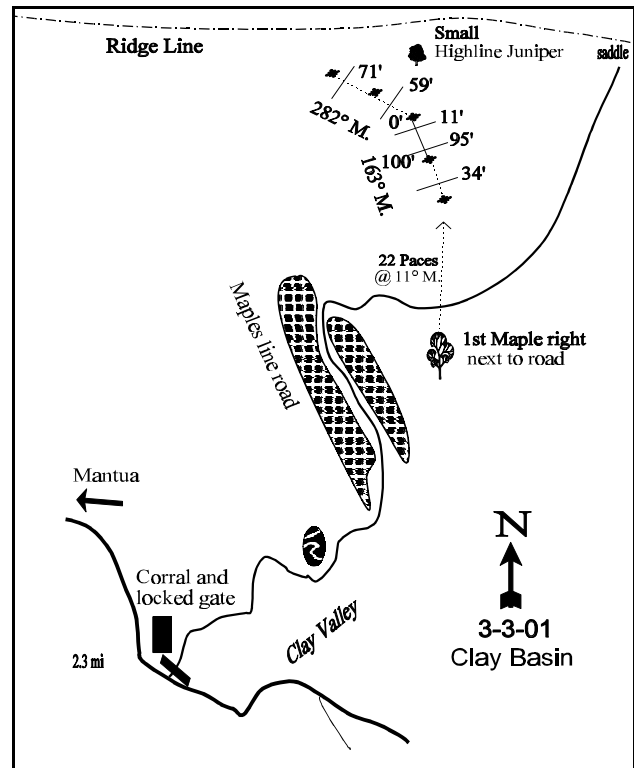
### LOCATION DESCRIPTION

From Mantua Hatchery, proceed 0.65 mile (towards Mantua) to first possible right turn. Turn right and proceed 2.3 miles up the canyon to Clay Valley and stop at a locked gate on the east end of the corral. Cross the gate and begin walking down the road in a northern direction. You will pass a stock pond on the left side of the road. After approximately 0.75 miles, the road will pass through a dense stand of maples. Hook sharply to the right and break out of the maples. Proceed 54 paces past switchback to first lone maple on right side of the road. From the maple, walk approximately 22 paces on a bearing of 11 degrees magnetic to the 200-foot stake of the baseline. The 0-foot baseline stake is 200 feet at a bearing of 343 degrees magnetic and is marked by browse tag #7997. The first 200 feet of the baseline run 163 degrees magnetic. The second 200 feet run off the 0-foot baseline stake at a bearing of 282 degrees magnetic.



Map Name: Mantua

Township 9N, Range 1W, Section 25



Diagrammatic Sketch

UTM 4593957 N 425426 E

## DISCUSSION

### Trend Study No. 3-3

The Clay Basin study is east of Mantua in Clay Valley. Situated at a relatively high elevation (6,320 feet), the site is on a 30%, south-facing slope occupied by a mountain big sagebrush-grass community. Although within the limits of deer winter range, there were few signs of any significant deer use from 1984-1996. Currently, there appears to be moderate use by deer and light use by elk. Pellet group transect data taken in 2001 estimated 61 deer days use/acre (150 ddu/ha) and 3 elk days use/acre (8 edu/ha). Spring and summer sheep grazing was obvious during the 1984 reading, but was light in 1996 and 2001. Cattle were using the area during the 1996 reading. Use was considered light on site, with heavy use being observed in the bottoms near water. Livestock use on site was estimated at 2 cow days use/acre (5 cdu/ha) in 2001.

Soil at the study site is "Yeates Hollow Stony Loam", a well-drained, moderately deep soil derived from sandstone and quartzite. It is rocky or cobbly on the surface, and usually dries completely in the upper 4 to 12 inches after 60 to 90 consecutive days in summer (Chadwick et al. 1975). Although this soil type has a moderate erosion hazard, the current erosion condition classification ('01) determined soils to be stable. Protective cover provided by vegetation and litter prevent all but minor erosion. Soils at the site have a clay loam texture and a soil reaction that is slightly acidic (pH of 6.3). Effective rooting depth (see methods) was estimated at just over 12 inches. Gravel is abundant throughout the profile. Bare ground is rare and usually associated with cattle trails. Organic matter is relatively high at over 5%.

The key browse species is a vigorous stand of mountain big sagebrush which provides over 90% of the browse cover. Other shrubs such as mountain snowberry and stickyleaf low rabbitbrush are sparsely distributed throughout the area. The mountain big sagebrush population is stable with mostly light to occasionally moderate hedging. Density is estimated at 2,620, mostly mature, plants/acre in 2001. Recruitment from young plants declined from 23% in 1996 to 2% in 2001. This decline is most likely due to the extended drought as well as competition with the abundant herbaceous understory. Decadence was moderately high in 1990 at 42%, but has since declined to 18% in 1996 and 2001. Vigor is normal on all except a few decadent shrubs. Annual leader growth was relatively low at just over 2 inches in 2001, but seed production was abundant.

Perennial grasses show exceptionally vigorous growth and consist of a wide variety of species. Among the most frequently occurring are bluebunch wheatgrass, bulbous bluegrass, Sandberg bluegrass and Kentucky bluegrass. Bulbous bluegrass has significantly increased in nested frequency every year since the site was established in 1984. Bluebunch wheatgrass is currently ('01) second in abundance to bulbous bluegrass. In 1996, Japanese brome was extremely abundant providing 33% of the grass cover and 21% of total vegetative cover at the site. Due to drought conditions in 2000 and 2001, this species dramatically declined between 1996 and 2001. It currently ('01) provides only 2% of the grass cover. Slightly lower on the slope are significant amounts of slender wheatgrass, mountain brome, smooth brome, subalpine needlegrass, crested wheatgrass and Great Basin wildrye. Grasses show evidence of light to negligible grazing use.

Forbs are diverse yet have not been particularly abundant. Weedy forb species include western yarrow, thistle, willowweed, dyers woad, prickly lettuce, sunflower, tarweed and yellow salsify which accounted for the majority of the forb cover in 1996. Silvery lupine is currently the most abundant forb due to a dramatic increase in 2001. Many of the more palatable forb species had been moderately grazed by sheep during the 1984 reading.

## 1984 APPARENT TREND ASSESSMENT

Soil trend appears stable. Erosion is slight due to a good vegetative cover on a gentle to moderate slope. Vegetative trend also seems stable, at least temporarily. However, there is a potential for change. Grass density may be thickening at the expense of desirable forbs, perhaps in response to the grazing habits of sheep. Such a trend could also inhibit sagebrush reproduction. Another possibility is an increase of undesirable weeds and annuals. These are common on the study area and could easily become more so.

## 1990 TREND ASSESSMENT

This privately owned sagebrush/grass range in Clay basin has recently been grazed by cattle and receives moderate winter deer use. Mountain big sagebrush has remained stable and vigorous since 1984. Seedling and young sagebrush commonly occur in limited areas, but were not sampled by the density plots. The majority of the sagebrush have a light or moderately hedged growth form. Trend for herbaceous species is slightly up with significant increases in the nested frequency of the desirable perennial grasses, bluebunch wheatgrass and Sandberg bluegrass. One negative aspect is the increase in dyer's woad which should be closely monitored in the future. Cheatgrass remains a commonly occurring undesirable. Under the current management and grazing by cattle instead of sheep, the trends for winter range values appear stable.

### TREND ASSESSMENT

soil - stable (3)

browse - stable, with sagebrush slightly increasing (3)

herbaceous understory - slightly up (4)

## 1996 TREND ASSESSMENT

Trend for soil is up due to a decline in percent bare ground (12% to 2%). Litter cover increased while rock and pavement cover declined from 13% to 4%. Trend for mountain big sagebrush is stable. Population density declined somewhat, but much of the decline is due to the much larger sample used in 1996 which gives a much better estimate of sagebrush densities. Dead plants are fairly rare (220 plants/acre or 7%), indicative of a stable population. Utilization is mostly light, decadence has declined from 42% to 18%, and recruitment is high at 23%. Trend for the herbaceous understory is slightly down. The herbaceous understory is dominated by bulbous bluegrass and Japanese brome. Nested frequency for bluebunch wheatgrass has increased significantly since 1990, but nested frequency for Kentucky bluegrass and Sandberg bluegrass have declined. Sum of nested frequency for perennial forbs significantly decreased, while that of annual forbs significantly increased. However, forbs are a minor component as they contribute to only 6% of the total vegetation cover at the site.

### TREND ASSESSMENT

soil - up (5)

browse - stable (3)

herbaceous understory - slightly down (2)

## 2001 TREND ASSESSMENT

Trend for soil is stable. Although bare ground slightly increased, vegetation and litter cover are adequate to prevent serious erosion. An erosion condition classification determined soils to be stable at the present time. Trend for browse is stable. The key species, mountain big sagebrush, remains at a nearly stable density. Percent recruitment declined from 23% to 2%, but percent decadence is unchanged since 1996. Vigor is good in the majority of the population as use remains light to moderate. Trend for the herbaceous understory is

slightly up. Sum of nested frequency for perennial grasses and forbs increased in 2001. Although much of this increase is due to the increase in bulbous bluegrass, a low value perennial, Japanese brome dramatically decreased in nested and quadrat frequencies in 2001.

#### TREND ASSESSMENT

soil - stable (3)

browse - stable (3)

herbaceous understory - slightly up (4)

#### HERBACEOUS TRENDS --

Herd unit 03 , Study no: 3

Type	Species	Nested Frequency				Quadrat Frequency				Average Cover %	
		'84	'90	'96	'01	'84	'90	'96	'01	'96	'01
G	Agropyron spicatum	<sub>a</sub> 28	<sub>b</sub> 87	<sub>c</sub> 156	<sub>c</sub> 176	10	31	68	65	8.15	11.82
G	Agropyron trachycaulum	2	2	-	1	1	1	-	1	-	.00
G	Bromus japonicus (a)	-	-	<sub>b</sub> 293	<sub>a</sub> 64	-	-	87	30	12.51	.86
G	Bromus marginatus	-	3	-	-	-	1	-	-	-	-
G	Bromus tectorum (a)	-	-	25	29	-	-	9	10	.31	.64
G	Koeleria cristata	1	-	-	-	1	-	-	-	-	-
G	Melica bulbosa	44	36	15	28	19	21	9	12	.22	.17
G	Poa bulbosa	<sub>a</sub> 18	<sub>b</sub> 63	<sub>c</sub> 213	<sub>d</sub> 307	6	26	68	91	12.98	19.38
G	Poa pratensis	<sub>ab</sub> 79	<sub>b</sub> 97	<sub>a</sub> 44	<sub>b</sub> 86	30	41	20	33	1.30	3.42
G	Poa secunda	<sub>a</sub> 20	<sub>b</sub> 129	<sub>b</sub> 87	<sub>a</sub> 41	8	49	33	20	2.44	.68
G	Stipa columbiana	-	-	-	3	-	-	-	1	-	.15
Total for Annual Grasses		0	0	318	93	0	0	96	40	12.83	1.50
Total for Perennial Grasses		192	417	515	642	75	170	198	223	25.12	35.64
Total for Grasses		192	417	833	735	75	170	294	263	37.95	37.15
F	Achillea millefolium	<sub>b</sub> 99	<sub>b</sub> 87	<sub>a</sub> 51	<sub>ab</sub> 51	39	34	25	27	.89	1.21
F	Agoseris glauca	<sub>b</sub> 50	<sub>b</sub> 37	<sub>a</sub> 10	<sub>ab</sub> 32	20	18	5	17	.02	.26
F	Allium acuminatum	<sub>c</sub> 44	<sub>b</sub> 14	<sub>a</sub> -	<sub>ab</sub> 3	20	8	-	1	-	.03
F	Alyssum alyssoides (a)	-	-	25	11	-	-	11	7	.05	.06
F	Arabis spp.	-	-	-	-	-	-	-	-	-	.00
F	Aster spp.	1	-	-	-	1	-	-	-	-	-
F	Astragalus spp.	<sub>b</sub> 20	<sub>b</sub> 28	<sub>a</sub> -	<sub>a</sub> -	12	10	-	-	-	-
F	Camelina microcarpa (a)	-	-	3	-	-	-	1	-	.00	-
F	Calochortus nuttallii	5	6	-	-	2	5	-	-	-	-
F	Cirsium undulatum	<sub>a</sub> 3	<sub>b</sub> 23	<sub>ab</sub> 16	<sub>ab</sub> 11	3	12	7	6	.77	.30
F	Collomia linearis (a)	-	-	<sub>b</sub> 28	<sub>a</sub> 1	-	-	16	1	.08	.00
F	Collinsia parviflora (a)	-	-	<sub>a</sub> 1	<sub>b</sub> 9	-	-	1	3	.00	.01
F	Crepis acuminata	3	-	1	-	1	-	1	-	.00	-

T y p e	Species	Nested Frequency				Quadrat Frequency				Average Cover %	
		'84	'90	'96	'01	'84	'90	'96	'01	'96	'01
F	Cryptantha spp.	-	-	3	3	-	-	2	1	.03	.00
F	Draba spp. (a)	-	-	1	10	-	-	1	5	.00	.02
F	Epilobium brachycarpum (a)	-	-	<sub>b</sub> 39	<sub>a</sub> 3	-	-	16	2	.35	.01
F	Eriogonum brevicaule	-	-	-	3	-	-	-	1	-	.03
F	Erodium cicutarium (a)	-	-	-	5	-	-	-	2	-	.06
F	Galium aparine (a)	-	-	<sub>b</sub> 11	<sub>a</sub> -	-	-	5	-	.10	-
F	Geranium spp.	3	-	3	-	1	-	1	-	.01	-
F	Gilia spp. (a)	-	-	-	1	-	-	-	1	-	.00
F	Grindelia squarrosa	-	2	-	4	-	1	-	2	-	.53
F	Helianthus annuus (a)	-	5	13	3	-	3	5	1	.10	.00
F	Holosteum umbellatum (a)	-	-	41	35	-	-	16	18	.22	.15
F	Isatis tinctoria	<sub>a</sub> 9	<sub>b</sub> 109	<sub>a</sub> 6	<sub>a</sub> 5	5	47	4	2	.04	.03
F	Lappula occidentalis (a)	-	-	1	1	-	-	1	1	.00	.00
F	Lactuca serriola	<sub>a</sub> -	<sub>b</sub> 75	<sub>a</sub> 1	<sub>a</sub> 3	-	32	1	1	.00	.00
F	Lupinus argenteus	<sub>a</sub> 23	<sub>a</sub> 33	<sub>a</sub> 21	<sub>b</sub> 118	13	16	11	55	.47	7.05
F	Madia glomerata (a)	-	<sub>ab</sub> 11	<sub>b</sub> 19	<sub>a</sub> 3	-	5	8	1	.21	.00
F	Microsteris gracilis (a)	9	-	6	-	4	-	2	-	.03	-
F	Phlox longifolia	-	2	-	-	-	1	-	-	-	-
F	Polygonum douglasii (a)	-	-	35	-	-	-	20	-	.10	-
F	Senecio multilobatus	<sub>b</sub> 53	<sub>a</sub> 7	<sub>a</sub> -	<sub>a</sub> 8	26	2	-	4	-	.02
F	Taraxacum officinale	<sub>a</sub> 3	<sub>b</sub> 13	<sub>a</sub> 1	<sub>a</sub> -	1	6	1	-	.00	-
F	Tragopogon dubius	<sub>a</sub> 11	<sub>c</sub> 117	<sub>a</sub> 13	<sub>b</sub> 63	7	53	6	34	.08	1.63
F	Unknown forb-perennial	<sub>a</sub> -	<sub>b</sub> 25	<sub>a</sub> -	<sub>a</sub> -	-	14	-	-	-	-
F	Viola spp.	<sub>a</sub> -	<sub>b</sub> 19	<sub>a</sub> -	<sub>a</sub> -	-	12	-	-	-	-
Total for Annual Forbs		9	16	223	82	4	8	103	42	1.28	0.34
Total for Perennial Forbs		327	597	126	304	151	271	64	151	2.34	11.13
Total for Forbs		336	613	349	386	155	279	167	193	3.62	11.48

Values with different subscript letters are significantly different at alpha = 0.10 (annuals excluded)

## BROWSE TRENDS --

Herd unit 03 , Study no: 3

Type	Species	Strip Frequency		Average Cover %	
		'96	'01	'96	'01
B	Acer grandidentatum	1	1	.03	.15
B	Artemisia tridentata vaseyana	78	73	16.62	23.46
B	Chrysothamnus nauseosus albicaulis	2	2	.03	-
B	Chrysothamnus viscidiflorus viscidiflorus	2	3	.03	.00
B	Gutierrezia sarothrae	1	0	-	-
B	Juniperus osteosperma	1	1	.53	.03
B	Symphoricarpos oreophilus	6	9	.21	1.50
Total for Browse		91	89	17.45	25.14

## CANOPY COVER --

Herd unit 03 , Study no: 3

Species	Percent Cover '01
Acer grandidentatum	.60
Juniperus osteosperma	1

## BASIC COVER --

Herd unit 03 , Study no: 3

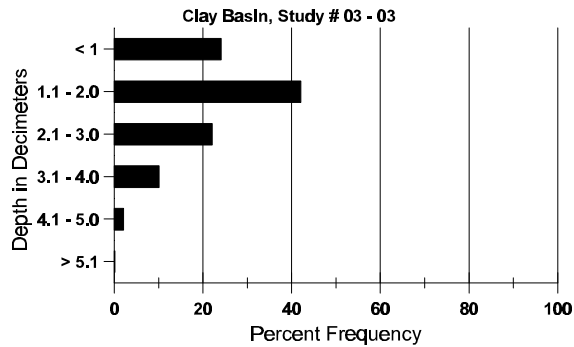
Cover Type	Nested Frequency		Average Cover %			
	'96	'01	'84	'90	'96	'01
Vegetation	383	371	3.00	14.25	58.50	67.65
Rock	50	25	3.75	1.75	.58	.28
Pavement	154	136	3.50	10.75	3.86	1.87
Litter	398	391	76.25	61.50	66.88	55.39
Cryptogams	9	24	.50	0	.07	.15
Bare Ground	88	130	13.00	11.75	2.17	5.49

## SOIL ANALYSIS DATA --

Herd Unit 03, Study no: 03, Clay Basin

Effective rooting depth (in)	Temp °F (depth)	PH	%sand	%silt	%clay	%0M	PPM P	PPM K	dS/m
12.3	61.0 (13.4)	6.3	28.7	42.0	29.3	5.3	29.3	240.0	.5

## Stoniness Index



### PELLET GROUP FREQUENCY --

Herd unit 03 , Study no: 3

Type	Quadrat Frequency		Pellet Transect	
	'96	'01	Pellet Groups per Acre	Days Use per Acre (ha)
			'01	'01
Sheep	1	-	-	-
Elk	3	-	44	3 (8)
Deer	7	22	792	61 (150)
Cattle	4	1	26	2 (5)

### BROWSE CHARACTERISTICS --

Herd unit 03 , Study no: 3

A G R E	Y	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches)		Total
		1	2	3	4	5	6	7	8	9	1	2	3	4		Ht.	Cr.	
Acer grandidentatum																		
Y	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	96	-	-	-	1	-	-	-	-	-	1	-	-	-	20		1	
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
M	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
	96	-	-	-	-	-	-	-	-	-	-	-	-	-	0	22	29	0
	01	1	-	-	-	-	-	-	-	-	1	-	-	-	20	-	-	1
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'84		00%			00%			00%										
'90		00%			00%			00%										
'96		00%			00%			00%			+ 0%							
'01		00%			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)													'84	0	Dec:	-		
													'90	0		-		
													'96	20		-		
													'01	20		-		

A G E	Y R	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.		Total
		1	2	3	4	5	6	7	8	9	1	2	3	4				
Artemisia tridentata vaseyana																		
S	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	96	5	-	-	-	-	-	-	-	-	5	-	-	-	100		5	
	01	2	-	-	-	-	-	-	-	-	2	-	-	-	40		2	
Y	84	1	-	-	-	-	-	-	-	-	1	-	-	-	66		1	
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	96	33	-	-	-	-	-	-	-	-	33	-	-	-	660		33	
	01	2	-	-	-	-	-	-	-	-	2	-	-	-	40		2	
M	84	25	16	5	-	-	-	-	-	-	46	-	-	-	3066	29	43	
	90	22	3	-	8	-	-	-	-	-	33	-	-	-	2200	39	38	
	96	79	7	-	-	-	-	-	-	-	86	-	-	-	1720	22	41	
	01	93	13	-	-	-	-	-	-	-	100	5	1	-	2120	27	42	
D	84	2	2	2	-	-	-	-	-	-	4	-	2	-	400		6	
	90	16	4	1	3	-	-	-	-	-	20	2	2	-	1600		24	
	96	22	3	-	1	-	-	-	-	-	23	-	-	3	520		26	
	01	13	10	-	-	-	-	-	-	-	16	2	-	5	460		23	
X	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	96	-	-	-	-	-	-	-	-	-	-	-	-	-	220		11	
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	380		19	
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'84		34%			13%			04%			+ 7%							
'90		12%			02%			04%			-24%							
'96		07%			00%			02%			-10%							
'01		18%			00%			05%										
Total Plants/Acre (excluding Dead & Seedlings)												'84	3532	Dec:	11%			
												'90	3800		42%			
												'96	2900		18%			
												'01	2620		18%			



A G E	Y R	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.		Total
		1	2	3	4	5	6	7	8	9	1	2	3	4				
Chrysothamnus nauseosus albicaulis																		
M	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
	96	1	-	-	-	-	-	-	-	-	1	-	-	-	20	32	60	1
	01	1	-	-	-	-	-	-	-	-	1	-	-	-	20	29	41	1
D	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
	96	1	-	-	-	-	-	-	-	-	1	-	-	-	20			1
	01	1	-	-	-	-	-	-	-	-	-	-	-	1	20			1
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'84		00%			00%			00%										
'90		00%			00%			00%										
'96		00%			00%			00%			+ 0%							
'01		00%			00%			50%										
Total Plants/Acre (excluding Dead & Seedlings)												'84	0	Dec:	0%			
												'90	0		0%			
												'96	40		50%			
												'01	40		50%			
Chrysothamnus viscidiflorus viscidiflorus																		
M	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
	96	1	-	-	-	-	-	-	-	-	1	-	-	-	20	12	24	1
	01	3	-	-	-	-	-	-	-	-	3	-	-	-	60	15	24	3
D	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
	96	1	-	-	-	-	-	-	-	-	-	-	-	1	20			1
	01	1	-	-	-	-	-	-	-	-	-	-	-	1	20			1
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'84		00%			00%			00%										
'90		00%			00%			00%										
'96		00%			00%			50%			+50%							
'01		00%			00%			25%										
Total Plants/Acre (excluding Dead & Seedlings)												'84	0	Dec:	0%			
												'90	0		0%			
												'96	40		50%			
												'01	80		25%			

A G E	Y R	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.		Total
		1	2	3	4	5	6	7	8	9	1	2	3	4				
Gutierrezia sarothrae																		
M	'84	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
	'90	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
	'96	1	-	-	-	-	-	-	-	-	-	1	-	-	20	13	20	1
	'01	-	-	-	-	-	-	-	-	-	-	-	-	-	0	8	118	0
% Plants Showing		<u>Moderate Use</u>				<u>Heavy Use</u>				<u>Poor Vigor</u>				<u>%Change</u>				
'84		00%				00%				00%								
'90		00%				00%				00%								
'96		00%				00%				00%								
'01		00%				00%				00%								
Total Plants/Acre (excluding Dead & Seedlings)												'84	0	Dec:	-			
												'90	0		-			
												'96	20		-			
												'01	0		-			
Juniperus osteosperma																		
M	'84	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
	'90	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
	'96	-	-	-	-	-	-	1	-	-	1	-	-	-	20	-	-	1
	'01	-	-	-	-	-	-	-	1	-	1	-	-	-	20	-	-	1
% Plants Showing		<u>Moderate Use</u>				<u>Heavy Use</u>				<u>Poor Vigor</u>				<u>%Change</u>				
'84		00%				00%				00%								
'90		00%				00%				00%								
'96		00%				00%				00%				+ 0%				
'01		00%				00%				00%								
Total Plants/Acre (excluding Dead & Seedlings)												'84	0	Dec:	-			
												'90	0		-			
												'96	20		-			
												'01	20		-			

A G E	Y R	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.		Total
		1	2	3	4	5	6	7	8	9	1	2	3	4				
Symphoricarpos oreophilus																		
M	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
	96	-	-	-	4	-	-	-	-	-	4	-	-	-	80	22	47	4
	01	8	3	-	1	-	-	-	-	-	12	-	-	-	240	61	48	12
D	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
	96	1	-	-	-	1	1	-	-	-	1	-	-	2	60			3
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
X	84	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
	90	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
	96	-	-	-	-	-	-	-	-	-	-	-	-	-	100			5
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'84		00%			00%			00%										
'90		00%			00%			00%										
'96		14%			14%			29%			+42%							
'01		25%			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)												'84	0	Dec:	0%			
												'90	0		0%			
												'96	140		43%			
												'01	240		0%			